

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6860

Petitions of Vermont Electric Power Company, Inc.)
(VELCO) and Green Mountain Power Corporation)
(GMP) for a certificate of public good, pursuant to)
30 V.S.A. Section 248, authorizing VELCO to)
construct the so-called Northwest Vermont)
Reliability Project, said project to include: (1))
upgrades at 12 existing VELCO and GMP)
substations located in Charlotte, Essex, Hartford,)
New Haven, North Ferrisburgh, Poultney, Shelburne,)
South Burlington, Vergennes, West Rutland,)
Williamstown, and Williston, Vermont; (2) the)
construction of a new 345 kV transmission line from)
West Rutland to New Haven; (3) the reconstruction)
of a portion of a 34.5 kV and 46 kV transmission line)
from New Haven to South Burlington; and (4) the)
reconductoring of a 115 kV transmission line from)
Williamstown to Barre, Vermont –)

Order entered: 11/30/2007

ORDER RE FERRY ROAD DESIGN PLANS

Introduction

On March 28, 2007, the Public Service Board ("Board") issued an Order requiring Vermont Electric Power Company, Inc. ("VELCO") to place a portion of the 115 kV line underground in the vicinity of Ferry Road. The March 28 Order included language directing VELCO to install appropriate electro-magnetic field ("EMF") shielding along the underground portion of the line. On October 25, 2007, VELCO filed design plans for the underground line in this area; VELCO's plans did not include any EMF shielding. In this Order, we approve VELCO's October 25 plans, with some modifications, as discussed further below.

Positions of the Parties

On November 9, 2007, the Department of Public Service ("Department") filed a letter posing several questions to VELCO regarding the design plans. The Department also contended that EMF shielding is not required for this area of the line because it believes that the shielding "is not necessary from a health perspective." The Department cites to the Board's January 28, 2005 Order stating that the policy of prudent avoidance does not require a generic policy of placing transmission lines underground¹ and finding that "EMF levels decrease more rapidly with distance for underground lines than for overhead lines with the same current."² The Department states that, if the Board finds that EMF shielding is required, the Board should direct VELCO to install top shielding, rather than full shielding.

On November 9, 2007, the Lake Champlain Waldorf Education Association ("LCWS") filed a letter objecting to portions of VELCO's October 25 filing. LCWS contends that VELCO should be required to install full EMF shielding. Further, LCWS contends that VELCO should be required to "provide a barrier to prevent children using the playfields on LCWS property and the pedestrian trail to be developed by the Town of Charlotte from inadvertently coming too close to the underground power." LCWS asserts that this barrier should prevent children and pedestrians from coming within 20 feet of the centerline of the duct bank if the Board orders full EMF shielding, or a 40-foot distance if the Board requires only top shielding.

LCWS further requests that the Board require VELCO to relocate the underground line farther south and closer to an existing hedgerow, rather than through the open field on LCWS property. Finally, LCWS contends that VELCO should include coniferous species to screen the riser pole to the north.

On November 19, 2007, VELCO filed a response to the Department's and LCWS' comments. VELCO's November 19 filing provides responses to the engineering questions raised by the Department's November 9 filing. In response to LCWS's filing, VELCO states that the term "appropriate shielding" for EMF is not defined in the Board's March 28 Order.

1. Docket 6860, Order of 1/28/05 at 75.

2. Docket 6860, Order of 1/28/05 at finding 126.

VELCO asserts that EMF levels from the underground line without shielding would be lower than EMF levels for the existing 34.5 kV overhead transmission line. VELCO further contends that LCWS' request for a physical barrier to prevent children and pedestrians from getting too close to the underground line has no scientific justification. VELCO asserts that EMF levels at the site are currently higher than the EMF levels for the underground line would be at the distance contemplated by LCWS' proposal for a protective barrier. VELCO states that, while it does not believe it is appropriate for Vermont ratepayers to bear the costs of the shielding and protective barrier, it is willing to pursue discussions on these issues if LCWS is willing to pay these costs.

With respect to moving a portion of the line to the south, VELCO states that such a move would result in placement of that portion of the line on the neighboring Greenwood America property; VELCO represents that Greenwood America is opposed to the proposed relocation. VELCO contends that an underground line would not adversely impact the use of the open field.

Finally, VELCO contends that the use of willow for screening to the north of the riser pole is appropriate given the wetlands conditions and would provide adequate screening during the winter. However, VELCO states that it is open to working with the landowner to ensure adequate screening.

Discussion

The engineering questions raised by the Department regarding the underground line appear to be resolved by VELCO's November 19 response. VELCO states that it has not had an opportunity to discuss its responses with the Department but represents that the Department has stated that "this should not delay the Board in approving the final line design as filed."³

The Board's March 28 Order stated that the underground design plan "must include appropriate EMF shielding of the underground line in the vicinity of the Waldorf School property." VELCO and the Department contend that shielding should not be required, and if any shielding is required, it should be limited to top shielding. The language of our March 28 Order

3. Letter filed November 19, 2007, from William Piper, on behalf of VELCO, to Susan Hudson, Clerk of the Board.

is clear that there must be some form of EMF shielding near the school. LCWS states that "[b]ased on expert review of the data provided by VELCO, LCWS believes that only full shielding as described by VELCO in its October 18, 2007 internal Memorandum would satisfy the Board's Order." However, LCWS does not explain what expert review was provided on this issue. LCWS further states that it "is prepared to present expert testimony on this analysis if necessary." However, LCWS did not provide this additional information during the comment period, nor did LCWS request additional time to present comments. Given the location of the underground line and the reductions in EMF levels achieved by placing the line underground, the Board concludes that the top shielding provides sufficient EMF protection.¹

The factors mentioned above also convince the Board that the protective barrier requested by LCWS is not necessary. LCWS does not provide any rationale as to why the barrier is required. On this issue, and the issue of shielding, we find instructive that LCWS located its school in close proximity to an existing transmission line and the EMF levels from the existing 34.5 kV line would be higher than the EMF levels from the underground line. We decline to require a protective barrier as requested by LCWS.

Similarly, LCWS does not provide sufficient rationale as to why the portions of the underground line should be shifted to the south onto Greenwood America's property. LCWS does not sufficiently explain why an underground line is incompatible with the use of the open field, particularly if EMF shielding is installed. Accordingly, we accept VELCO's route depicted on its October 25 plans.

Finally, we find that VELCO's proposed aesthetic mitigation is sufficient to ensure that the construction in this area will not produce an undue adverse aesthetic impact. However, we note that VELCO has stated it "remains flexible to work with the landowner to adjust vegetation screening to best accomplish its goals with minimum negative impact on the users of the property." We expect VELCO to work with LCWS to determine if additional screening could be installed at the site.

SO ORDERED.

1. If LCWS continues to believe that full shielding is appropriate, LCWS may pay the incremental cost of installing the full shielding.

Dated at Montpelier, Vermont, this 30th day of November, 2007.

_____)	
)	PUBLIC SERVICE
)	
<u>s/David C. Coen</u>)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: November 30, 2007

ATTEST: s/Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)